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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,275	03/25/2004	Neil Andrew Abercrombie Simpson	CRUI/0010	6046

7590 10/20/2006

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EXAMINER

DANG, HOANG C

ART UNIT PAPER NUMBER

3672

DATE MAILED: 10/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/809,275

Applicant(s)

SIMPSON, NEIL ANDREW

Examiner

Hoang Dang

Art Unit

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-115 and 118-130 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 110-115 is/are allowed.
- 6) ☒ Claim(s) See Continuation Sheet is/are rejected.
- 7) ☒ Claim(s) 12, 14, 21, 47, 49, 66-69, 75-77, 82, 99, 105, 107-109, 120, 126 and 127 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11/14/05; 8/20/04; 3/25/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continuation of Disposition of Claims: Claims rejected are 1-11, 13, 15-20, 22-46, 48, 50-65, 70-74, 78-81, 83-98, 100-104, 106, 118, 119, 121-125 and 128-130.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-11, 18, 22-26, 28, 32, 45, 46, 56-59, 63, 64, 70, 71, 81, 101, 102 and 106 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Artynov et al (US 5,031,699).

The fluid pressure in the expandable tubing 14 is built up (i.e., "varied") to expand the tubing (see the sentence bridging columns 3 and 4 and column 4, lines 45-48).

The pressure externally of the tubing 14 of Artynov et al is varied when cement is pumped into the annulus as shown in figures 3 and 4.

As casing 5 is lowered into the well, well fluid raises ball 17 in the shoe 15 and fills up the internal space 21 within expandable tubing 14.

The "seal" that isolates a portion of tubing 14 to be expanded from ambient fluid does not distinguish from ball 17 of Artynov et al.

3. Claims 1-11, 13, 15, 16-20, 23, 25-28, 32-46, 48, 50-60, 63-65, 70-74, 78-80, 83-98, 100-104, 118, 119, 121-125 and 128-130 rejected under 35 U.S.C. 102(a) as being clearly anticipated by Freeman (US 6,681,862) (see figures 2-10).

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It is noted that since the pressure within the tubing is built up before it can reach the pressure that can move the expansion cone to expand the tubing, the fluid pressure applied to the tubing of Freeman is varied as recited.

As for claims 5 and 59, as the tubing is expanded, the volume of the annulus surrounding the tubing is reduced and results in a pressure change therein.

As for claims 40-43, see seals 62 and 58.

As for claims 45-46, 103 and 104, a fluid associated with the tubing of Freeman inherently has lubricating and flow characteristics.

As for claims 17, 54-55 and 94, see downhole tractor in figures 8A-8B of Freeman.

As for claim 60, see "movable wall" 56 or 76.

As for claims 63-65, the pressure applied to the tubing when the pump is just started apparently less than at a later time.

As for claims 18-20, 70-74, 95-98, 118, 119, 124 and 125, see seals defined by members 62 and 58. Seal defined by member 62 apparently allows a degree of leakage.

As for claims 78-79, see column 7, lines 4-9.

4. Claims 1, 3, 4, 6-11, 16, 17, 28-31, 44, 56-65, 78, 79, 101-103, 106 and 121 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Bodine (US 4,716,555) or Smith (US 3,048,226).

It is noted that these above listed claims do not require the step or means for expanding the tubing. The claimed method steps or structure read exactly on the Bodine or Smith reference which discloses a device and method for creating pressure pulses in a tubing.

Allowable Subject Matter

5. Claims 12, 14, 21, 47, 49, 66-69, 75-77, 82, 99, 105, 107-109, 120, 126 and 127 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. Claims 110-115 are allowed.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang Dang whose telephone number is 571-272-7028. The examiner can normally be reached on 9:15-5:45 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated

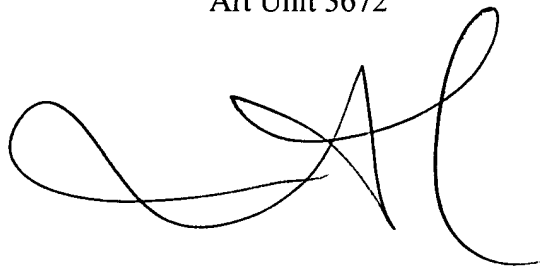
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information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hoang Dang
Primary Examiner
Art Unit 3672

A handwritten signature in black ink, appearing to be 'HD' with a large loop and a trailing flourish.